Section 01731

CUTTING AND PATCHING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Cutting, patching and fitting of the Work or work under construction. Coordinating Installation or connection of the Work to existing facilities, or uncovering work for access, inspection or testing and related submittals.

1.02 CUTTING AND PATCHING

- A. Perform activities to avoid interference with facility operations and work of others in accordance with Document 00700 General Conditions of Contract.
- B. Execute cutting and patching, including excavation, backfill and fitting to:
 - 1. remove and replace defective work or work not conforming to Drawings and Specifications;
 - 2. take samples of installed work as required for testing;
 - remove construction required to provide for specified alterations or additions to existing work;
 - 4. uncover work to allow inspection or reinspection by Project Manager or regulatory agencies having jurisdiction;
 - 5. connect uninstalled work to completed work in proper sequence;
 - 6. remove or relocate existing utilities and pipes that obstruct work;
 - 7. make connections or alterations to existing or new facilities:
 - 8. provide openings, channels, chases and flues and cut, patch, and finish; if required; or
 - 9. provide protection for other portions of the Work.
- C. Restore existing work to a condition equal to or better than that which existed prior to cutting and patching, and to standards required by Specifications.

- D. Support, anchor, attach, match, trim and seal materials to work of others. Unless otherwise specified, Furnish and Install sleeves, inserts, and hangers required for execution of the Work.
- E. Provide shoring, bracing and support necessary to maintain structural integrity and to protect adjacent work from damage during cutting and patching. Request written approval from Project Manager, before cutting structural members such as beams, anchors, lintels, or other supports. Follow approved submittals, as applicable.
- F. Match new materials to existing materials by bonding, lapping, mechanically tying, anchoring or other effective means in order to prevent cracks and to minimize evidence of patching. Conceal effects of demolition and patching by blending new construction to existing surfaces. Avoid obvious breaks, joints or changes of surface appearance unless shown on Drawings or authorized by Project Manager.

1.03 SUBMITTALS

- A. Conform to requirements of Section 01330 Submittal Procedures.
- B. Submit a written request to Project Manager for consent to proceed, before conducting cutting operations that might affect structural integrity, design function, City operations, or work of another contractor.
- C. Include the following in submittal:
 - 1. Identification of Project
 - 2. Description of affected work
 - 3. Necessity for cutting
 - 4. Effect on other work and on structural integrity
 - Describe the proposed work including:
 - a. Scope of cutting and patching
 - b. Contractor, Subcontractor or Supplier who will execute the work
 - c. Proposed Products
 - d. Extent of refinishing
 - e. Schedule of operations
 - 6. Alternatives to cutting and patching

- D. When work conditions or schedules dictate the need for change of materials or methods, submit a written recommendation to Project Manager that includes:
 - 1. conditions necessitating the change;
 - 2. recommendations for alternative materials or methods; and
 - 3. submittals required for proposed substitutions
- E. Notify Project Manager in writing when work will be uncovered for observation. Do not begin cutting or patching operations until authorized by Project Manager.

1.04 CONNECTIONS TO EXISTING FACILITIES

- A. Perform construction operations necessary to complete connections and tie-ins to existing facilities. Keep existing facilities in continuous operation unless otherwise permitted in the Specifications or approved in writing by Project Manager.
- B. Coordinate interruption of service requiring connection to existing facilities with Project Manager. Do not bypass wastewater or sludge to waterways. Provide temporary pumping facilities to handle wastewater if necessary. Use temporary bulkheads to minimize disruption. Provide temporary power and piping to facilitate construction where necessary.
- C. Submit a detailed schedule of proposed connections, including shut-downs and tie-ins. Include proposed time and date as well as anticipated duration of work. Coordinate the connection schedule with the construction schedule.
 - 1. Submit specific times and dates to Project Manager at least 48 hours in advance of proposed work.

D. Procedures and Operations:

- 1. Operate existing pumps, valves and gates in required sequence under supervision of Project Manager. Do not operate valves, gates or other items of equipment without Project Manager's knowledge.
- 2. If possible, test equipment under operating conditions before making final tie-ins to connect equipment to existing facility.
- 3. Coordinate work and schedules. Notify Project Manger at least 48 hours before shutdowns or bypasses are required.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

END OF SECTION